#205 PERM UIC Permit Files

Permanent \_



Region 8 36792

0396-103

Checklist - Administrative Record

Century Oil + GAS Comporation. Date Received 30 July 1984

NW 27- 29N - 50E.

#### PERMIT APPLICATION REVIEW CHECKLIST

- I. For a new well (including conversions) there are 30 days to determine completeness. For an existing well, there are 60 days.
- All application requirements must be fulfilled. Requirements can be II. found in 144.31 as follows (this includes the amendment made in the May 11 promulgation, addition of 144.31(9)):
- All applicants for permits shall provide the following information to EPA using the standard permit application form:
  - 1. The activities conducted by the applicant which require it to obtain a UIC permit.

Name, mailing address and location of the facility for which

the application is submitted. ... 3.

Up to four SIC codes which best reflect the principal products or services provided by the facility. Should be 1389

Operator's name, address, telephone number, ownership status and status as Federal, State, private, public or other entity.

Whether the facility is located on Indian lands. Yes.

Listing of all permits or construction approvals received or applied for under any of the following programs: UIC; NPDE3; PSD; Nonattainment: NESHAPS: 404; Other relevant environmental permits. including State permits.

Topographic map (or other, if topo is unavailable) extending one mile beyond the property boundries of the source, depicting facility; each well where fluids are injected underground, springs and other surface water boundries, and drinking water wells listed Echibit I ares not facility property boundry. in public record or otherwise known to applicant within 1/4 mile of

Brief description of nature of business. - Not available to extent (9X) List of names and addresses of all owners of record of land within 1/4 mile of facility boundry.

--- 10. All required attachments as listed below. See the reverse of the permit application form for details.

Il existing A, E, G, H, MQR-U oprionel J, K, O, P (0?) gryle/Boyring 8/9-To for from cersons

(a) Need to have the (b) Ediabit I does not

Not an Forem

Bud still to be reason

NENW 27-29N-50E Attachme for Class II Wells (Existing) Area of Review Methods whataland SS. above Judith? Rechild, Name and Depth of USDWs - Quether allowed to cryicat an of Geological Data on Injection and Confining Zone \_ Inc ×g. Operating Data - Therefore Monate ? Volume ?? Construction Details XII + II Plugging and Abandonment Plan Financial Responsibility Aguifer Exemption Requests Not needed. Existing EPA Permits Description of Business need to amplify. Attachments for Class II Wells (New) Area of Review Methods a. Maps of Wells/Area and Area of Review b. Corrective Action Plan and Well Data c. Name and Depth of USDWs e. Geological Data on Injection and Confining Zonew g. Operating Data h. Construction Details m. Plugging and Abandonment Plan q. Financial Responsibility

B. If the well needs an aquifer exemption, get the necessary information if the application, or request it from the applicant. The well cannot be permitted without an aquifer exemption.

C. All signature and certification requirements must also be complied with. Requirements are listed in 144.32. They are as follows:

No written authorization of a vice-president;

- b. For a partnership or sole proprietorship: by a general partner or the proprieter, respectively; or
- c. For a municipality; State, Federal or other public agency: By either a principal executive or ranking elected official.
- D. For Class II wells only, the permit application may also be signed by a duly authorized representative of any person in the above paragraph. Duly authorized representatives are described in 144.32(b).
- III. If the application is incomplete, list all the information necessary to make the application complete, and draft a transmittal letter for the RA's signature requesting the missing information.
- IV. If the application is complete, prepare a letter for the RA's signature notifying the applicant of the determination of completeness and of the effective date of the permit application. If the permit is for a major facility, draft a project decision schedule as well.

The form of Complete NESS

STERMINATION OF COMPLETE NESS

FOR CONTROL OILY GAS CORPORATION'S GOINGS # 1 SWOW.

NW27-29W-50E

Specifics Specifics In order for the application to be determined complete the following additional information must be provided. 1) The more appropriate SIC code for this facility, which is the injection well, is 1389. The STC dode provided, a production well. However, because the site has a heater treater the 1311 is the secondary product of the facility, because Voil will be I systemed off What State permits have been granted to this injection well. Doesn't the Executive Sicretary Deer Richman need to sign the effective? To they have a Ben peint. 3) The top portion of topography map in Exhibit I is missing. (This on missing portion is dirthen the one soul hadres. Also note that Exhibit I does agree with Exhibit II see plotting of 27-1 and 27-3 and the radius of orientle

cicle.

A) Need a bruf description of the bruseness deterrited that occurs at the injection well in addition for what Contine Oil & Cas Corporation does. This requirement is found in Attachment U.

Som attachment to there is tobe a listing of the name and dipth of any USDIS above the Injection familiar Why surrevert the sandstones differ the Hell. Hell Creek Fort lession listed The geologica information submitted as part of attachment to was incomplete to demanded that the Fox Hells/Hell Careh and Fort Union formations out crop in the area around the well.

amplified. A local geological major.

meeds to be furnished. The sight of

the confinite some and its fractione

pressure meed to be furnished (include

how fraction graded was extermined).

The injection some thickness and

fraction pressure also nied. It be

provided. The Judith formation requires

ent formation) pressure to more fluid, 71 The operating data required in attachment Han intemplete. What are the maximum injection rate and volume of injected flikeds, What is the maximum pressure? 8) The application needs a written cuthorization from a sirce president or higher to pappoint Jack B. McWilliam as ha duly dithorized representation. 9) The application needs a list of names and addresses of all orinees of record of dand within If mile of the Enjection well.

#### Date ROUTING AND TRANSMITTAL SLIP 12-11-85 TO: (Name, office symbol, room number, Initials building, Agency/Post) Edna Walton (8WM-DW) Regional Counsel - Andy Lensink Pat Crotty Roger Frenette Not dated Max Dodson (signatures) Note and Return Action File Per Conversation Approval TFor Clearance As Requested For Correction Prepare Reply For Your Information See Me Circulate XXSignature Comment Investigate Coordination Justify REMARKS FINAL PERMIT NO .: MTS21PR - 0003 Century Oil & GAS Corp PERMITTEE: PACKAGE #1 Right Side Left Side Cover Letter (SIGNATURE) Concurrence Sheet Aquifer Exemption (SIGN) Checklist - Final Action Fianl Action Document (SIGN) Responsiveness Summary Addendum to Statement of Addendum to Statement of Basis (SOB) Basis Original SOB PACKAGE #2 Right Side Left Side Cover Letter Aquifer Exemption (SIGN) DO NOT use this form as a RECORD of approvais, concurrences, (SIGNATURE) clearances, and similar actions Room No .- Bldg. FROM: (Name, org. symbol, Agency/Post) Phone No.

5041-102

Bill Engle, Montana Office 8MO

# GPO: 1983 O - 381-529 (308)

OPTIONAL FORM 41 (Rev. 7-76) Prescribed by GSA FPMR (41 CFR) 101-11.206

FTS 585-5414

## CONCURRENCES WITH UIC PROGRAM PERMITTING ACTION

| DESCRIFTION OF PROPOSED ACTION:                                   | FINAL PERMIT FOR CENTURY OIL & GAS   |
|---|--|
| CORPORATIONS GOINGS +   | #1 WELL (SWDW) ROSEVELT COUNTY, M  |
| with all UIC Program regulations the attached checklist describes | at this action has been taken in accordance s and guidance in force at this time; and that s the major actions completed. EXCEPT AS PABLISHED 12/27/85, THE FORMAT |
|   | /_/  |
| THAT CHANGING TO THE NE   | ALSO USED FORTHE FINAL PERMIT. IT WAS FEE  |
| SIGNED: Charlef Bo  | 12/9/85  |
| AS DIRECT IMPLEMENTATION TEAM (                                   | LEADER, I have reviewed this permit action to  |
|   | ontains documentation indicative of a complete   |
|   | ew. All checklists have been completed, the  |
|   | consistent with current guidance, and the  |
|   | tent with others of its type, EXCEPT AS FOLLOWS:   |
| See Jim's explanation for for                                     | ormat (Above)  |
| SIGNED: WE Eng  | DATE: 12-11-85   |
|   | reviewed the administrative record (official dection is within the authority of the Water  |
| Management Division Director, as                                  | no that the proposed action is both legally  |
| sound and enforceable. EXCEFT                                     | AS FOLLOWS:  |
|   |  |
| SIGNED: Anhung. Comon   | DATE: 12/23/75   |
| As GROUND WATER SECTION CHIEF.                                    | I certify that this action is consistent   |
| with UIC Program policy; and the                                  | at the appropriate accountability systems have   |
| been adjusted to reflect this pr                                  | roposed action. EXCEPT AS FOLLOWS:   |
| Man 1   | 16   |
| SIGNED Wellen for   | 1AC DATE: 12/20/85   |
| AS DRINKING WATER BRANCH CHIEF                                    | , I have reviewed the proposed action and  |
|   | UIC Program objectives. The exceptions noted   |
|   | not create impediments. EXCEPT AS FOLLOWS:   |
|   | THOS EFEBCE TRIPEDIREFICES EXCEPT NO FOLLOWS.  |
|   |  |
| SIGNED:   | DATE:  |
|   | IRECTOR, I have reviewed the findings of my  |
|   | understand the exceptions noted by the Drinking  |
| permit action.  | cising my authority to approve this UIC Program  |
|   |  |
| STENED. Marklow   | dan 12/26/85   |

#### FINAL PERMIT CONSIDERATIONS

A. THE FOLLOWING EVENTS HAVE TRANSFIRED SINCE THE DRAFT PERMIT WAS RELEASED:

| YES  | NO. |   |
|------|-----|---|
|      |     | Public notice published - Date: 12/27/85.           |
|      |     | Copy of published notice received.                  |
|      |     | Affidavit of publication received.                  |
| _1/_ | ,   | Public comments received.                           |
|      |     | Applicant comments received.                        |
| ,    |     | Internal review comments received.                  |
| -4-/ | /   | Response to public comments completed.              |
|      |     | Public hearing held - Date: 5/29/85                 |
| _V_  |     | Final permit prepared.                              |
|      |     | Permit denial prepared.                             |
|      |     | Operator requested to Plug & Abandon existing well. |

B. AS A RESULT OF PUBLIC COMMENTS, THE FOLLOWING CHANGES HAVE BEEN MADE TO THE DRAFT PERMIT:

C. AS A RESULT OF FURTHER REGIONAL & HQ REVIEW, THE FOLLOWING CHANGES HAVE BEEN MADE TO THE DRAFT PERMIT:

CONDITION ID: FLOW METER REQUIREMENT ADDED

CONDITION 12: MIT TEST JUST COMPLETED, REWORK PEFORMER

REQUIRED SPECIAL MIT PROCEDURES BE ADDED,

ALSO REVISED MIT BOILER PLATE ADDED.

CONDITION; 21 REDISED TO REQUECT FINANCIAL RESPONSIBILITY DEMO

D. AS A RESULT OF THE APPLICANT'S COMMENTS, THE FOLLOWING CHANGES HAVE BEEN MADE TO THE DRAFT PERMIT: NOW

E. AS A RESULT OF THE PUBLIC HEARING: NONE EXCEPT AS RESULTING
POLICY STATEMENT APPLIES TO THIS PERMIT
IN ALLOWING IT TO BE ISSUED.

# U. S. ENVIRONMENTAL PROTECTION AGENCY. REGION VIII.

TRACKING SYSTEM FOR COMPLIANCE WITH.
UIC PERMIT SPECIAL CONDITIONS.

7.7.7

· ::-

| UIC PERMIT NO. MISZIPR -0003        | WRITTEN BY: Jan Borta              |
|-------------------------------------|------------------------------------|
| PERMIT CONDITION NO                 | ESTIMATED DATE DUE:                |
| FOLLOW-UP NOTES:                    |                                    |
| COMPLIANCE DATE:                    | _ (OR) ENFORCEMENT INITIATED DATE: |
| PERMIT CONDITION NO DESCRIPTION:    | ESTIMATED DATE DUE:                |
| FOLLOW-UP NOTES:                    |                                    |
| COMPLIANCE DATE:                    | (OR) ENFORCEMENT INITIATED DATE:   |
| DESCRIPTION:                        | ESTIMATED DATE DUE:                |
| FOLLOW-UP NOTES:                    | ;<br>                              |
| COMPLIANCE DATE:                    | _ (OR) ENFORCEMENT [NITIATED DATE: |
| DATE ENTERED INTO COMPUTER TRACKING | SYSTEM: BY:                        |

As WATER MANAGEMENT DIVISION DIRECTOR, I have reviewed the findings of my staff and concur with them. I understand the exceptions noted by the Drinking Water Branch Chief, and am exercising my authority to approve this UIC Program permit action.

SIGNED:

DATE: ///6/55

STATEMENT OF BASIS CENTURY OIL AND GAS CORPORATION GOINGS #1, ROOSEVELT COUNTY, MONTANA UIC PERMIT NUMBER MTS21PR-0003 CONTACTS: Jim Boyter U. S. Environmental Protection Agency Montana Office Federal Building, Drawer 10096 301 South Park Helena, Montana 59626 Telephone: (406) 449-5486 Pat Crotty U. S. Environmental Protection Agency Region VIII Ground Water Section 1860 Lincoln Street Denver, Colorado 80295 Telephone: (303) 844-2731 DESCRIPTION OF FACILITY AND BACKGROUND INFORMATION

Century Oil and Gas Corporation will inject water into the Goings #1 from the Goings #27-3 and the Robins 22-15 wells producing from the Charles Formation. The Goings #1 has been injecting produced fluids into the Judith River Formation since March 23, 1982. A maximum of 900 barrels of produced fluid will be injected each day. There are no known drinking water wells within the area of review.

Century Oil and Gas Corporation has supplied all required information and data necessary for permit issuance in accordance with 40 CFR Parts 144, 146, and 147, and a draft permit has been prepared.

The permit will be issued for the operating life of the injection well, therefore, no reapplication will be necessary unless the permit is terminated for reasonable cause (40 CFR 144.39, 144.40, and 144.41). However, the permit will be reviewed every five years, and may be reopened at any time should allegations of endangerment arise.

This Statement of Basis gives the derivation of the site-specific permit conditions and reasons for them. The general permit conditions for which the content is mandatory and not subject to site-specific differences (based on 40 CFR Parts 144, 146, and 147), are not included in the following discussion.

MONITORING DEVICE (Condition 11)

In order to allow a representative of EPA to inspect the well and take injection pressure measurements, we are requiring that the operator install a one-half inch fitting to: 1) the tubing, and 2) the tubing/casing annulus. In addition, a sampling tap shall be installed to allow for sampling of the injection fluid.

MECHANICAL INTEGRITY

(Condition 12)

The applicant did not submit a cement bond log. However, the cementing records submitted indicate adequate cement above the injection zone for the protection of USDW's.

INJECTION INTERVAL

(Condition 13)

The Judith River formation has been exempted in a 1/4 mile radius of the wellbore of the Goings #1 well as a USDW. The injection interval will be limited to this formation in the horizon between 1,028 feet and 1,116 feet where this well had been injecting approximately 400 barrels of salt water per day since March 1982 prior to the implementation of the UIC program in Montana.

INJECTION PRESSURE

(Condition 14)

Our files contain a record of a step rate test performed on March 20, 1982 when the subject well was completed as a salt water disposal well. The ISIP of 400 psi indicated and the formation breakdown pressure of 500 psi determined by us from the graphical presentation of the test appear to agree considering the friction loss in the 2-7/8 inch tubing used in the test. The test also indicates that an injection rate of 3,456 barrels of salt water per day was achieved with 500 psi injection pressure. The maximum injection pressure requested by the applicant was 700 psi which could initiate new fractures or propagate existing fractures in the confining zone and is, therefore, unacceptable. As the formation breakdown pressure will have increased with the increase in reservoir pressure since injection commenced in March 1982, the maximum injection pressure of 500 psi is considered safe.

INJECTION VOLUME-RATE LIMITATION

(Condition 15)

Current practice involves the injection of an average volume of 800 barrels per day, with a maximum volume of 900 barrels per day. The operator may continue to inject these volumes. However, at no time may the operator inject at a higher pressure than the maximum specified in Permit Condition 14 in order to maintain these volumes.

MONITORING REQUIREMENTS

(Condition 16)

The permittee is required to monitor water quality of the injection fluids at reasonable intervals. A water sample of injected fluids shall be analyzed for Total Dissolved Solids, major ions, and pH at quarterly intervals.

The permittee is also required to submit a comprehensive water quality analysis whenever the source of the injection fluid changes.

PLUGGING AND ABANDONMENT PLAN

(Condition 17, 18, 19 & 20)

The plugging and abandonment plan submitted by the applicant with the permit application is incorporated into the permit and shall be binding on the permittee. In addition, the requirement stating that the well should be abandoned in a state of static equilibrium was not addressed in the submitted Plugging and Abandonment Plan, that condition has been incorporated into the permit by reference. The minimum advance notice and post-plugging reporting requirements have been established.

FINANCIAL RESPONSIBILITY

(Condition 21 & 22)

The bond currently held by the applicant for plugging the well names the State of Montana as beneficiary, not EPA. EPA intends to deliver guidance to the permittee on the type, amount, and mechanism required by permittees to maintain Financial Responsibility in accordance with EPA policy. It is anticipated that this will be done during the public comment period. At that time, it will be necessary for the applicant to supply an acceptable demonstration. The permit to inject will not be issued until the applicant has submitted, and EPA has accepted, the required information showing that the applicant does have the resources to close, plug and abandon the injection well.

## UIC PERMIT CONCURRENCE SHEET

| Day 14 D                            | 1. 7/      | , ,                     |
|-------------------------------------|------------|-------------------------|
| Permit Processor                    | Alm Borten | _ Date: <u>/2/5/</u> 84 |
| Drafting Engineer                   | Jim Bouter | _ Date: 12/5/84         |
| Chief, Groundwater Section          |            | _ Date:                 |
| Chief, Drinking Water Branch        |            | Date:                   |
| Regional Counsel                    |            | <br>Date:               |
| Director, Water Management Division |            |                         |
| Public Notice Dated:                |            |                         |

Comments:

## UIC PERMIT TECHNICAL DEVELOPMENT. CHECKLIST

| Permittee: CENTURY OIL & GAS CORP UIC Permit No.: MTS2/PR-0003  |  |  |  |  |  |
|---|--|--|--|--|--|
| Type of Permit and Permit Action:   |  |  |  |  |  |
| Class I Class III Class IV Class V  |  |  |  |  |  |
| New Permit Renewal Modification   |  |  |  |  |  |
| Date application received: $\frac{7/30/84}{}$   |  |  |  |  |  |
| Date application considered complete: ###6/84 /2/3/84   |  |  |  |  |  |
| Site visit in conjunction with permit action: Yes No  |  |  |  |  |  |
| Date permit expires: $M/A$  |  |  |  |  |  |
| PERMIT CONDITIONS   |  |  |  |  |  |
| N/A Addressed Included  |  |  |  |  |  |
| Construction Requirements (Pt. 146)   |  |  |  |  |  |
| Corrective Action   |  |  |  |  |  |
| Operation Requirements (Pt. 146)  |  |  |  |  |  |
| Requirements for HW Wells (Pt. 144.14)  |  |  |  |  |  |
| Monitoring and Reporting Requirements (Pt. 146)   |  |  |  |  |  |
| Plugging and Abandonment Plan   |  |  |  |  |  |
| Evidence of Financial Responsibility  |  |  |  |  |  |
| Demonstration of Mechanical Integrity   |  |  |  |  |  |
| Compliance Schedule   |  |  |  |  |  |
| APPLICABILITY TO OTHER FEDERAL ACTS   |  |  |  |  |  |
| Comments No Comments Incorporated Received  |  |  |  |  |  |
| Wild and Scenic Rivers National Historic Preservation Endangered Species Fish and Wildlife Executive Orders |  |  |  |  |  |

NEPA

## ADMINISTRATIVE RECORD CHECKLIST

| Permittee      | : CENTURY OIL & GAS                    | CORD UIC Permit No .: MTS2/PR - 0003                |
|----------------|--|---|
| N/A            | <pre>Included(I) or Available(A)</pre> |   |
|                | A                                      | Application   |
|                | I                                      | Draft Permit  |
| <del>_</del> , | I                                      | Statement of Basis                                  |
| 1              |  | Fact Sheet  |
|                | A                                      | Supporting Documents Cited                          |
|                | I                                      | Public Notice                                       |
|                | I                                      | Public Notice Mailing List                          |
|                | <del></del>                            | Affadavit of Publication for Pub. Notice            |
|                | -                                      | Copy of Notice                                      |
|                |  | Public Comments                                     |
|                |  | Response to Public Comments                         |
|                |  | Data from State Agencies used in Permit<br>Decision |
|                |  | Coordination Completed with State                   |
|                |  | Public Hearing Record                               |
|                |  | Final Permit  |
|                |  | Other (i.e. Appeal/Evidentiary Hearing)             |
|                |  |   |

Comments:

Draft or Final Permit plus Aquifer Exemption (if applicable)



U.S. Environmental Protection Agency
Underground Injection Control Program
FINAL PERMIT
Class II Salt Water Disposal Well
Goings #1 Well
Permit # MTS21PR-0003

issued to:

Century Oil and Gas Corporation 7887 East Belleview Avenue Englewood, Colorado 80111

Date Prepared: December 5, 1985

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#### FINAL UIC PERMIT

Permit Number: MTS21PR-0003

In compliance with provisions of the Safe Drinking Water Act, as amended, (40 U.S.C. 300f-300j-9, commonly known as SDWA) and attendant regulations incorporated by the U.S. Environmental Protection Agency under Title 40 of the Code of Federal Regulations,

Century Oil and Gas Corporation 7887 East Belleview Avenue Englewood, Colorado 80111

is authorized to inject waste brine fluids into Goings #1, located in the NW quarter of Section 27, Township 29 N, Range 50 E of Roosevelt County, Montana, into the Judith River Formation, in accordance with conditions set forth herein. This permit does not constitute Bureau of Land Management (BLM) approval for subsurface injection. Applicant needs to contact BLM to determine if changes need to be made to the BLM permit.

All conditions set forth herein refer to Title 40 Parts 144, 146, and 147 of the Code of Federal Regulations and are regulations that are in effect on the date that this permit is effective.

This permit and the authorization to inject are issued for the operating life of the well but shall be reviewed at least every five years.

Signed and effective this 30th day of December, 1985

Max H. Dodson, Director

Water Management Division

#### PART I. GENERAL PERMIT CONDITIONS

#### A. EFFECT OF PERMIT

The permittee is allowed to engage in underground injection in accordance with the conditions of this permit. The underground injection activity, otherwise authorized by this permit or rule, shall not allow the movement of fluid containing any contaminant into underground sources of drinking water, if the presence of that contaminant may cause a violation of any primary drinking water regulation under 40 CFR Part 142 or otherwise adversely affect the health of persons. Any underground injection activity not authorized in this permit or otherwise authorized by permit or rule is prohibited. Issuance of this permit does not convey property rights of any sort or any exclusive privilege; nor does it authorize any injury to persons or property, any invasion of other private rights, or any infringement of State or local law or regulations. Compliance with the terms of this permit does not constitute a defense to any action brought under Section 1431 of the Safe Drinking Water Act (SDWA) or any other law governing protection of public health or the environment for any imminent and substantial endangerment to human health, or the environment, nor does it serve as a shield to the permittee's independent obligation to comply with all UIC regulations.

#### B. PERMIT ACTIONS

This permit may be modified, revoked and reissued, or terminated for cause as specified in 40 CFR Sections 144.39, 144.40, and 144.41. The filing of a request for a permit modification, revocation and reissuance, or termination or the notification of planned changes or anticipated noncompliance on the part of the permittee does not stay the applicability or enforceability of any permit condition.

#### C. SEVERABILITY

The provisions of this permit are severable, and if any provision of this permit or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit shall not be affected thereby.

#### D. GENERAL DUTIES AND REQUIREMENTS

- 1. Duty to Comply. The permittee shall comply with all conditions of this permit, except to the extent and for the duration such noncompliance is authorized by an emergency permit. Any permit noncompliance constitutes a violation of SDWA and is grounds for enforcement action, permit termination, revocation and reissuance, or modification.
- 2. Need to Halt or Reduce Activity not a Defense. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

- 3. Duty to Mitigate. The permittee shall take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with this permit.
- 4. Proper Operation and Maintenance. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of this permit.
- Duty to Provide Information. The permittee shall furnish the Regional Administrator, within a time specified, any information which the Regional Administrator may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee shall also furnish to the Regional Administrator, upon request, copies of records required to be kept by this permit.
- 6. <u>Inspection and Entry</u>. The permittee shall allow the Regional Administrator, or an authorized representative, upon the presentation of credentials and other documents as may be required by law to:
  - (a) Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records are kept under the conditions of this permit;
  - (b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
  - (c) Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
  - (d) Sample or monitor, at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by SDWA any substances or parameters at any location.

#### 7. Records.

(a) The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation and copies of all reports required by this permit for a period of at least five (5) years from the date of the sample, measurement or report. The permittee shall maintain records of all data required to complete the permit

application and any supplemental information submitted for a period of three (3) years from the effective date of the permit. These periods may be extended by request of the Regional Administrator at any time.

- (b) The permittee shall retain records concerning the nature and composition of all injected fluids until three (3) years after the completion of plugging and abandonment in accordance with the plugging and abandonment plan, Attachment A. The permittee shall continue to retain the records after the three year retention period unless he delivers the records to the Regional Administrator or obtains written approval from the Regional Administrator to discard the records.
- (c) Records of monitoring information shall include:
  - (i) The date, exact place, the time of sampling or measurements;
  - (ii) The individual(s) who performed the sampling or measurements;
  - (iii) The exact method(s) used to take samples;
  - (iv) The date(s) analyses were performed;
  - (v) The individual(s) who performed the analyses;
  - (vi) The analytical techniques/methods and types of lab procedures used; and
  - (vii) The results of such analyses.
- 8. <u>Signatory Requirements</u>. All reports or other information requested by the Regional Administrator shall be signed and certified according to 40 CFR 144.32.
- 9. Reporting Requirements.

- 1

- (a) PLANNED CHANGES. The permittee shall give notice to the Regional Administrator as soon as possible of any planned physical alterations or additions to the permitted facility.
- (b) ANTICIPATED NONCOMPLIANCE. The permittee shall give advance notice to the Regional Administrator of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.
- (c) TRANSFERS. This permit is not transferrable to any person except after notice is sent to the Regional Administrator and the requirements of 40 CFR 144.38 are complied with. The Regional Administrator may require modification or revocation of the permit to change the name of the permittee and incorporate such other requirements as may be necessary under SDWA.

(d) COMPLIANCE SCHEDULES. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 30 days following each schedule date.

#### (e) TWENTY-FOUR HOUR REPORTING.

- (i) The permittee shall report to the Regional Administrator any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. The following shall be included as information which must be reported orally within 24 hours:
  - (a) Any monitoring or other information which indicates that any contaminant may cause endangerment to an underground source of drinking water.
  - (b) Any noncompliance with a permit condition or malfunction of the injection system which may cause fluid migration into or between underground sources of drinking water.
- (ii) A written submission shall also be provided within 5 days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.
- (f) OTHER NONCOMPLIANCE. The permittee shall report all other instances of noncompliance not otherwise reported at the time monitoring reports are submitted. The reports shall contain the information listed in Permit Condition 9 (e)(ii).
- (g) OTHER INFORMATION. Where the permittee becomes aware that he failed to submit any relevant facts in the permit application, or submitted incorrect information in a permit application or in any report to the Regional Administrator, the permittee shall submit such facts or information within 2 weeks of the time such information became known to him.
- (h) ANNUAL REPORT. The permittee shall submit an annual report to the Regional Administrator summarizing the results of the monitoring required by Permit Condition 16. All monthly records on injected fluids, and any major changes in characteristics or sources of injected fluid shall be included in the annual report. The first annual report shall cover the period from the effective date of the permit through December 31. Subsequently, the annual report shall cover the period of January 1 through December 31, and shall be submitted by February 15 of the following year.

### PART II. SPECIFIC PERMIT CONDITIONS

#### E. SCHEDULE FOR COMPLIANCE

- 10. <u>Monitoring Device</u>. The operator shall provide and maintain in good operating condition:
  - (a) a tap on the suction intake line upstream of the injection pump for the purposes of obtaining representative samples of the injection fluids, and
  - (b) two one-half (1/2) inch iron pipe size (IPS) female fittings with cut-off valves (one each on the injection tubing and on the tubing/casing annulus) so that a gauge having a one-half (1/2) male fitting can be attached to measure injection pressure.
  - (c) a flow meter with cumulative volume recorder that is certified for 5 percent accuracy throughout the range of injection rates allowed by the permit.
- 11. <u>Time for Compliance</u>. Compliance with Condition 10 must be obtained within 3 months of the effective date of the permit.

#### F. CORRECTIVE ACTION

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The operator is not required to take any corrective action on any well within the area of review before the effective date of this permit.

#### G. WELL OPERATION AND MONITORING REQUIREMENTS

#### 12. Mechanical Integrity.

- (a) METHOD OF DEMONSTRATING MECHANICAL INTEGRITY. A demonstration of the absence of significant leaks in the tubing must be made by performing a tubing pressure test. This test shall be conducted with a temporary tubing plug set at the bottom of the tubing and for a period of 45 minutes with a tubing pressure equal to the maximum injection pressure allowed by this permit. The tubing shall be filled with a non-corrosive fluid (either a non-toxic liquid or the injection fluid) with the temporary tubing plug in place at least 24 hours in advance of the test. Pressure values will be recorded at five minute intervals. This well passes the test if there is no more than a 10 percent decrease in pressure over the 45 minute period.
- (b) SCHEDULE FOR DEMONSTRATIONS OF MECHANICAL INTEGRITY. A demonstration of mechanical integrity shall be made at regular intervals, no less frequently than every five (5) years from the effective date of this permit, in accordance with 40 CFR 146.8 and paragraph (a) above, unless otherwise modified. Initiation of mechanical integrity demonstrations will be according to the following provisions.

- (i) It shall be the permittee's responsibility to arrange and conduct the routine five-year demonstrations. The permittee shall notify the Director of his intent to demonstrate mechanical integrity at least thirty (30) days prior to each such demonstration. Results of the test shall be submitted to the Director as soon as possible but no later than sixty (60) days after the demonstration.
- (ii) In addition to any demonstration made under paragraph (i) above, the Director may require a demonstration of mechanical integrity at any time during the permitted life of the well.
- (c) LOSS OF MECHANICAL INTEGRITY. If the well fails to demonstrate mechanical integrity during a test, or a loss of mechanical integrity as defined by 40 CFR 146.8 becomes evident during operation, the permittee shall notify the Director in accordance with Part I, Section D. 9(e). of this permit. Furthermore, injection activities shall be terminated immediately; and operation shall not be resumed until the permittee has taken necessary actions to restore integrity to the well and EPA gives approval to recommence injection.
- 13. <u>Injection Interval</u>. <u>Injection shall be limited to the Judith River Formation in the subsurface interval between 1,028 ft. and 1,116 ft.</u>
- 14. <u>Injection Pressure Limitation</u>.
  - (a) Injection pressure, measured at the surface, shall not exceed 500 pounds per square inch (psi).
  - (b) Injection at a pressure which initiates fractures in the confining zone or causes the movement of injection or formation fluids into an underground source of drinking water is prohibited.
- 15. <u>Injection Volume-Rate Limitation</u>. No more than 900 barrels per day of produced brine wastes shall be injected into this well provided further that in no case shall injection pressure exceed that limit shown in Condition 14 above.
- 16. Monitoring Requirements.
  - (a) Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. The permittee shall identify the types of tests and methods used to generate the monitoring data.
  - (b) Injection fluid analysis the nature of injection fluids shall be monitored:

- (1) quarterly for Total Dissolved Solids, major ions and pH,
- (2) whenever there is a change in the source of injection fluids. A comprehensive water analysis equivalent to that submitted with the permit application shall be submitted to the Regional Administrator within 30 days of any change in injection fluids.
- (c) Injection pressure, flow rate and cumulative volume Injection pressure, flow rate and cumulative volume shall be observed weekly. At least one observation of injection pressure, flow rate, and cumulative volume, shall be recorded at regular intervals no greater than 30 days apart.
- (d) The permittee may request that the frequency of analysis in paragraph (b)(1) above, be reduced after the first year if the reduced frequency will yield data representative of the nature of the injected fluids. The reduced frequency shall not be less than once per year.

#### H. PLUGGING AND ABANDONMENT

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- 17. Notice of Plugging and Abandonment. The permittee shall notify the Regional Administrator 45 days before conversion or abandonment of the well.
- 18. Plugging and Abandonment Plan. The permittee shall plug and abandon the well as provided in the plugging and abandonment plan. See Attachment A.
- 19. <u>Cessation of Injection Activities</u>. After a cessation of operations of two years, the permittee shall plug and abandon the well in accordance with the Plugging & Abandonment Plan, unless he:
  - (a) provides notice to the Regional Administrator,
  - (b) demonstrates that the well will be used in the future, and
  - (c) describes actions or procedures, satisfactory to the Regional Administrator, that will be taken to ensure that the well will not endanger underground sources of drinking water during the period of temporary abandonment.
- 20. Plugging and Abandonment Report. Within 60 days after plugging the well, the permittee shall submit a report to the Regional Administrator. The report shall be certified as accurate by the person who performed the plugging operation and the report shall consist of either: (1) a statement that the well was plugged in accordance with the plan (see Condition 18); or (2) where actual plugging differed from the plan, specifying the different procedures used.

- 21. <u>Demonstration of Financial Responsibility</u>. The permittee is required to maintain financial responsibility and resources to close, plug and abandon the injection well as provided in the plugging and abandonment plan.
  - (a) The letter of credit (# SC4185) in the amount of \$30,000 issued by the Colorado National Bank of Denver, Colorado which names EPA as beneficiary in the event of permittee default in the plugging and abandonment requirements, is hereby incorporated as part of this permit. The standby trust agreement established by the permittee shall remain in effect for the duration of this permit.
  - (b) The permittee may, upon written request to EPA, change the type of financial mechanism or instrument utilized. A change in demonstration of financial responsibility must be approved by the Director. A minor permit modification will be made to reflect any change in financial mechanisms, without further opportunity for public comment.
- 22. <u>Insolvency of Financial Institution</u>. The permittee must submit an alternative demonstration of financial responsibility acceptable to the Director, within sixty (60) days after either of the following events occur.
  - (a) the institution issuing the trust or letter of credit files for bankruptcy; or
  - (b) the authority of the trustee institution to act as trustee, or the authority of the institution issuing the surety bond, is suspended or revoked.

ATTACHMENT A
Plugging and Abandonment Plan

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Form Approved, OMB No. 2040-0042, Approval expires 9-30-85 UNITED STATES ENVIRONMENTAL PRO ION AGENCY WASHINGTON, DC 204 **SEPA** PLUGGING AND ABANDONMENT PLAN NAME AND ADDRESS OF FACILITY NAME AND ADDRESS OF OWNER/CPERATOR Century Oil & Gas Corporation Goings #1 SWDW 7887 E. Belleview Ave, Suite 800 NENW Section 27, T29N-R50E Englewood, CO 80111 Roosevelt County, Montana PERMIT NUMBER STATE COUNTY LOCATE WELL AND OUTLINE UNIT ON MTS21PR-0003 · MT Roosevelt SECTION PLAT - 640 ACRES SURFACE LOCATION DESCRIPTION M SECTION 27 TOWNSHIP 29N NE WOF NW WOF LOCATE WELL IN TWO DIRECTIONS FROM NEAREST LINES OF QUARTER SECTION AND DRILLING UNIT Surface Location 528. It. from (N/Si \_\_\_\_ Line of quarter section and 2065 It. from (E/W). Line of quarter section TYPE OF AUTHORIZATION **WELL ACTIVITY** XIndividual Permit CLASS I Ε ☐ Area Permit DE CLASS II 🛱 Brine Disposal ☐ Rul. ☐ Enhanced Recovery Number of Wells \_\_\_\_\_\_\_ ☐ Hydrocarbon Storage CLASS III Goings Well Number Lease Name METHOD OF EMPLACEMENT OF CEMENT PLUGS CASING AND TUBING RECORD AFTER PLUGGING The Balance Method TO BE PUT IN WELL (FT) TO BE LEFT IN WELL (FT) WT(LB/FT) HOLE SIZE SIZE ☐ The Dump Bailer Method 8-578 24 302 302 12 - 1/4☐ The Two-Plug Method 14 5 1/2 1186 1186 7-7/8 Other 2 7/8 6.5 953 953 PLUG #3 PLUG #4 PLUG #5 PLUG #6 PLUG #7 CEMENTING TO PLUG AND ABANDON DATA: PLUG #1 PLUG #2 2 7/8 Size of Hole or Pipe in which Plug Will Be Placed (inches) Depth to Bottom of Tubing or Drill Pipe (ft.) 953 45 Sacks of Cement To Be Used (each plug) 50 Slurry Volume To Be Pumped (cu. ft.) Burface Calculated Top of Plug (ft.) Measured Top of Plug (if tagged ft.) \$urface Slurry Wt. (Lb./Gal.) 15.8 Type Cement or Other Material (Class III) Class G LIST ALL OPEN HOLE AND/OR PERFORATED INTERVALS AND INTERVALS WHERE CASING WILL BE VARIED (If any) From From 1028 1038 1080 1096 1108 1116

#### CERTIFICATION

I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information. I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. (Ref. 40 CFR 144.32)

HAME AND OFFICIAL TITLE (Please type or print) Jack B. McWilliams Vice President, Production BMewlliams

DATE SIGNED

12/5/85

Estimated Cost to Plug Wells

\$5,000

ATTACHMENT B

Downhole Schematic

| DATE  | 12/5/85 | WELL NO                        | #1 SWD                                  | LEASE _                        | Goings      | FIELD NW Poplar                              |
|---|---------|--------------------------------|---|--------------------------------|-------------|--|
| DATE TO SELECTION OF SELECTION | 12/5/85 | 100 sacks 27/8° 6.5# Baker Loc | Class G'as  T55 Tob  Set packer  Whiver | ment beh<br>ng e 953<br>e 953' | 2 coments d | with 200 sacks Class '6'                     |
|   |         | 51/2" /4#                      | 155 Casi                                | ins e 1186                     | cemented wi | 108'- 1116' (25PF)  THE BASKET + PERFORATION |

### ATTACHMENT C

## Reporting Forms

| 1. | EPA Form 7520- 7: | APPLICATION TO TRANSFER PERMIT                   |
|----|-------------------|--|
| 2. | EPA Form 7520-10: | COMPLETION REPORT FOR BRINE DISPOSAL WELL        |
| 3. | EPA Form 7520-11: | ANNUAL DISPOSAL/INJECTION WELL MONITORING REPORT |
| 4. | EPA Form 7520-12: | WELL REWORK RECORD                               |
| 5. | EPA Form 7520-13: | PLUGGING RECORD                                  |

| <b>S</b> FPΔ   | WASHINGTON, DC 20460   |   |   |  |  |
|--|--|---|---|--|--|
| NAME AND ADDRESS OF EXISTING PERMITTEE   | APPLICATIO   | ON TO TRANSFER PERMIT  NAME AND ADDRESS OF SURFACE OWNER  |   |  |  |
|  |  |   | PERMIT NUMBER   |  |  |
| LOCATE WELL AND OUTLINE UNIT ON<br>SECTION PLAT — 640 ACRES  | STATE COUNTY   |   | PERMIT NOMBER   |  |  |
|  | Surface Locationft. from (I andft. from (E/W) WELL ACTIVITY  Class I Class II Brine Disposal Enhanced Recon Hydrocarbon Str Class III Other Lease Name | Ween the existing and new permyerage, and liability between the tresponsibility by the submission             | TYPE OF PERMIT  Individual Area Number of Wells  r.  nittee containing a em. n of surety bond, or |  |  |
|  |  |   |   |  |  |
|  | CERTIFIC   |   |   |  |  |
| I certify under the penalty of law submitted in this document and immediately responsible for obta and complete. I am aware that the the possibility of fine and impriso | l all attachments a<br>vining the informati<br>ere are significant p   | nd that, based on my inquiry of<br>ion, I believe that the information<br>penalties for submitting false info | f those individuals<br>n is true, accurate,   |  |  |
| NAME AND OFFICIAL TITLE (Please type or print)   | SIGNATURE  |   | DATE SIGNED   |  |  |

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UNITED STATES ENVIRONMENTAL PROTECTION AGEN WASHINGTON, DC 20460

Form Approved OMB No. 2040-0042 Approval expires 9-30-86

COMPLETION REPORT FOR BRINE DISPOSAL, HYDRCCARBON STORAGE, OR ENHANCED RECOVERY WELL

| NAME AND ADDRESS OF EXISTING PERMITTEE         |        |  |  |                                       |  | NAME AND ADDRESS OF SURFACE OWNER                |  |  |           |                              |                   |                               |                |                 |                    |                    |  |
|--|--------|--|--|---------------------------------------|--|--|--|--|-----------|------------------------------|-------------------|-------------------------------|----------------|-----------------|--------------------|--------------------|--|
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| <del>                                   </del> |        |  |  | SURFACE L                             | OCATION DE                                       | SCRIPTION  |  |  |           |                              |                   |                               |                |                 |                    |                    |  |
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| w   | SURFACE LOCATION DESCRIPTION  |  |  |                                      |   |  |  |
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| USE ADDITIONAL SHEETS IF                       | NECESSAR      | Υ                   |                            |             | Log Typ                       | es   | Logged Intervals                          |  |
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to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. (Ref. 40 CFR 122.22).

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#### **ADDENDUM**

#### STATEMENT OF BASIS

#### CENTURY OIL AND GAS CORPORATION

#### GOINGS #1, ROOSEVELT COUNTY, MONTANA

#### UIC PERMIT NUMBER MTS21PR-0003

EPA held a hearing on May 29, 1985, upon request of the Fort Peck Tribes, to gather factual information regarding the hydrogeologic characteristics of the Judith River Formation, and to allow comments to be heard concerning our intent to issue this permit. This well is one of several disposal wells injecting fluid into the Judith River Formation, which the Tribe had requested to be protected as an underground source of drinking water (USDW). This well was injecting prior to the inception of the UIC program (June 25, 1984), and is therefore authorized by rule. As a result of the public hearing and a subsequent technical evaluation of the testimony presented at the hearing, EPA has prepared a statement which establishes EPA's policy on permitting existing and future wells that inject into the Judith River Formation on the Fort Peck Reservation. The issuance of the final permit for this injection well, the Goings #1, is in compliance with that policy.

The draft permit for the Goings #1 Well was published on December 27, 1984. Since that publication this well failed a mechanical integrity test on September 25, 1985, was reworked to remedy the casing leak, and subsequently passed a retesting of mechanical integrity on October 13, 1985.

The following three conditions are being revised. The first one is revised as a result of administrative revision within the UIC program since publication of the draft permit; the second as a result of the administrative revisions plus the specific rework program performed on the well; and the third as a result of Century's fulfillment of the financial responsibility requirements.

#### Monitoring Device

(Condition 10)

In order to allow a representative of EPA to take injection pressure measurements, EPA is requiring that the permittee install one-half inch fittings with cut-off valves on the tubing and on the casing-tubing annulus. In addition, a sampling tap will be installed and used to collect a representative grab sample for analytical purposes. Also, the permittee is required to install a flow meter with cumulative volume recorder to accomplish required monitoring.

#### Mechanical Integrity

(Condition 12)

This permit condition was revised to reflect the recent successful mechanical integrity test and to describe the method of demonstrating mechanical integrity to be used in the future as necessitated by the rework program which consisted of cementing the tubing/casing annulus to surface, the subsequent mechanical integrity test requirements, and requirements in the event of loss of mechanical integrity.

# Financial Responsibility

(Condition 21)

The applicant submitted a irrevocable standby letter of credit (Number SC-4185) from Colorado National Bank of Denver in the amount of \$30,000; and a Standby Trust Agreement with the Colorado National Bank of Denver to provide appropriate coverage for the Goings #1 Well and two other wells in the State of Montana and, thereby, satisfy EPA's financial responsibility requirements. The permit includes provisions for requiring alternative financial responsibility demonstration in the event that the issuing institution of the letter of credit or trust becomes insolvent, or the authority of a trustee or institution used in the financial responsibility demonstration is suspended or revoked.

U.S. Environmental Protection Agency
Underground Injection Control Program
DRAFT PERMIT

Class II Salt Water Disposal Well

Going #1 Well Permit # MTS21PR-0003

issued to:

Century Oil and Gas Corporation 7887 East Belleview Avenue Englewood, Colorado 80111

Date Prepared: December 18, 1984



# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

#### **REGION VIII**

# 1860 LINCOLN STREET DENVER, COLORADO 80295-0699

#### DRAFT UIC PERMIT

Permit Number: MTS21PR-0003

In compliance with provisions of the Safe Drinking Water Act, as amended, (40 U.S.C. 300f-300j-9, commonly known as SDWA) and attendant regulations incorporated by the U.S. Environmental Protection Agency under Title 40 of the Code of Federal Regulations,

Century Oil and Gas Corporation 7887 East Belleview Avenue Englewood, Colorado—80111

is authorized to inject waste brine fluids into Goings #1, located in the NW quarter of Section 27, Township 29 N, Range 50 E of Roosevelt County, Montana, into the Judith River Formation, in accordance with conditions set forth herein. This permit does not constitute Bureau of Land Management (BLM) approval for subsurface injection. Applicant needs to contact BLM to determine if changes need to be made to the BLM permit.

All conditions set forth herein refer to Title 40 Parts 144, 146, and 147 of the Code of Federal Regulations and are regulations that are in effect on the date that this permit is effective.

This permit and the authorization to inject are issued for the operating life of the well but shall be reviewed at least every five years.

|        |     |           |      | <br>        | _   | -                  | <br>       |
|--------|-----|-----------|------|-------------|-----|--------------------|------------|
| Signed | and | effective | this | <br>_day of | f _ | ·<br>- <del></del> | <br>, 1984 |

Max H. Dodson, Director Water Management Division

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### PART I. GENERAL PERMIT CONDITIONS

#### A. EFFECT OF PERMIT

The permittee is allowed to engage in underground injection in accordance with the conditions of this permit. The underground injection activity, otherwise authorized by this permit or rule, shall not allow the movement of fluid containing any contaminant into underground sources of drinking water, if the presence of that contaminant may cause a violation of any primary drinking water regulation under 40 CFR Part 142 or otherwise adversely affect the health of persons. Any underground injection activity not authorized in this permit or otherwise authorized by permit or rule is prohibited. Issuance of this permit does not called property rights of any sort or any exclusive privilege; noracles it authorize any injury to persons or property, any invasion of other private rights, or any infringement of State or local law or regulations. Compliance with the terms of this permit does not constitute a defense to any action brought under Section 1431 of the Safe Drinking Water Act (SDWA) or any other law governing protection of public health or the environment for any imminent and substantial endangerment to human health, or the environment, nor does it serve as a shield to the permittee's independent obligation to comply with all UIC regulations.

#### B. PERMIT ACTIONS

This permit may be modified, revoked and reissued, or terminated for cause as specified in 40 CFR Sections 144.39, 144.40, and 144.41. The filing of a request for a permit modification, revocation and reissuance, or termination or the notification of planned changes or anticipated noncompliance on the part of the permittee does not stay the applicability or enforceability of any permit condition.

#### - - C. - SEVERABILITY

The provisions of this permit are severable, and if any provision of this permit or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit shall not be affected thereby.

#### D. GENERAL DUTIES AND REQUIREMENTS

- 1. Duty to Comply. The permittee shall comply with all conditions of this permit, except to the extent and for the duration such noncompliance is authorized by an emergency permit. Any permit noncompliance constitutes a violation of SDWA and is grounds for enforcement action, permit termination, revocation and reissuance, or modification.
- 2. Need to Halt or Reduce Activity not a Defense. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

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Permit No. MTS21PR-0003

- 3. <u>Duty to Mitigate</u>. The permittee shall take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with this permit.
- 4. Proper Operation and Maintenance. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar-systems only when necessary to achieve compliance with the conditions of this permit.
- Duty to Provide Information. The permittee shall furnish the Regional Administrator, within a time specified, any information which the Regional Administrator may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee shall also furnish to the Regional Administrator, upon request, copies of records required to be kept by this permit.
- 6. <u>Inspection and Entry</u>. The permittee shall allow the Regional Administrator, or an authorized representative, upon the presentation of credentials and other documents as may be required by law to:
  - (a) Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records are kept under the conditions of this permit;
  - (b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
  - (c) Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
  - (d) Sample or monitor, at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by SDWA any substances or parameters at any location.

# 7. Records.

(a) The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation and copies of all reports required by this permit for a period of at least five (5) years from the date of the sample, measurement or report. The permittee shall maintain records of all data required to complete the permit

application and any supplemental information submitted for a period of three (3) years from the effective date of the permit. These periods may be extended by request of the Regional Administrator at any time.

- (b) The permittee shall retain records concerning the nature and composition of all injected fluids until three (3) years afte the completion of plugging and abandonment in accordance with the plugging and abandonment plan, Attachment A. The permitt shall continue to retain the records after the three year retention period unless he delivers the records to the Region Administrator or obtains written approval from the Regional Administrator to discard the records.
- (c) Records of monitoring information shall include:
  - (i) The date, exact place, the time of sampling or measurements;
  - (ii) The individual(s) who performed the sampling or measurements;
  - (iii) The exact method(s) used to take samples;
    - (iv) The date(s) analyses were performed;
    - (v) The individual(s) who performed the analyses;
  - (vi) The analytical techniques/methods and types of lab procedures used; and
  - (vii) The results of such analyses.
- 8. <u>Signatory Requirements</u>. All reports or other information requested by the Regional Administrator shall be signed and certified accord to 40 CFR 144.32.
- 9. Reporting Requirements.
  - (a) PLANNED CHANGES. The permittee shall give notice to the Regional Administrator as soon as possible of any planned physical alterations or additions to the permitted facility.
  - (b) ANTICIPATED NONCOMPLIANCE. The permittee shall give advance notice to the Regional Administrator of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.
  - (c) TRANSFERS. This permit is not transferrable to any person except after notice is sent to the Regional Administrator and the requirements of 40 CFR 144.38 are complied with. The Regional Administrator may require modification or revocation the permit to change the name of the permittee and incorporate such other requirements as may be necessary under SDWA.

Page 4 of 7 Permit No. MTS21PR-0003 (d) COMPLIANCE SCHEDULES. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 30 days following each schedule date. (e) TWENTY-FOUR HOUR REPORTING. The permittee shall report to the Regional Administrator any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. The following shall be included as information which must be reported orally within 24 hours: Any monitoring or other information which indicates that any contaminant may cause endangerment to an underground source of drinking water. Any noncompliance with a permit condition or malfunction of the injection system which may cause fluid migration into or between underground sources of drinking water. (ii) A written submission shall also be provided within 5 days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. (f) OTHER NONCOMPLIANCE. The permittee shall report all other instances of noncompliance not otherwise reported at the time monitoring reports are submitted. The reports shall contain the information listed in Permit Condition 9 (e)(ii). OTHER INFORMATION. Where the permittee becomes aware that he failed to submit any relevant facts in the permit application, or submitted incorrect information in a permit application or in any report to the Regional Administrator, the permittee shall submit such facts or information within 2 weeks of the time such information became known to him. (h) ANNUAL REPORT. The permittee shall submit an annual report to the Regional Administrator summarizing the results of the monitoring required by Permit Condition 16. All monthly records on injected fluids, and any major changes in characteristics or sources of injected fluid shall be included in the annual report. The first annual report shall cover the period from the effective date of the permit through December 31. Subsequently, the annual report shall cover the period of January 1 through December 31, and shall be submitted by February 15 of the following year.

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Permit No. MTS21PR-0003

#### PART II. SPECIFIC PERMIT CONDITIONS

#### E. SCHEDULE FOR COMPLIANCE

- 10. Monitoring Device. The operator shall provide and maintain in good operating condition:
  - (a) a tap on tubing for the purposes of obtaining representative samples of the injection fluids, and
  - (b) two one-half (1/2) inch iron pipe size (IPS) female fittings with cut-off valves (one each on the injection tubing and on the tubing/casing annulus) so that a guage having a one-half (1/2) male fitting can be attached to measure injection pressure.
- 11. Time for Compliance. Compliance with Condition 10 must be obtained within-3-months of the effective date of the permit.

#### F. CORRECTIVE ACTION

The operator is not required to take any corrective action on any well within the area of review before the effective date of this permit.

- G. WELL OPERATION AND MONITORING REQUIREMENTS
  - 12. Mechanical Integrity.
    - (a) INITIAL DEMONSTRATION. Injection operations are prohibited until the permittee demonstrates that the well covered by this permit has mechanical integrity in accordance with 40 CFR 146.8 and the permittee has received notice from the Regional Administrator that such a demonstration is satisfactory.
    - (b) SUBSEQUENT DEMONSTRATION. A demonstration of mechanical integrity in accordance with 40 CFR 146.8 shall be made every five years from the effective date of this permit. The permittee shall notify the Regional Administrator of his intent to demonstrate mechanical integrity at least 30 days prior to such scheduled demonstration. Results of the test shall be submitted to the Regional Administrator as soon as possible but no later than 60 days after the demonstration. The permittee may continue operations only if the well has demonstrated mechanical integrity, otherwise injection activities shall be halted.

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- (c) Mechanical integrity tests shall be performed using noncorrosive fluids consisting of either fresh water or corrosion inhibited formation fluid from the production zone.
- 13. <u>Injection Interval</u>. <u>Injection shall be limited to the Judith River Formation in the subsurface interval between 1,028 ft. and 1,116 ft.</u>
- 14. Injection Pressure Limitation.
  - (a) Injection pressure, measured at the surface, shall not exceed .500 pounds per square inch (psi).
  - (b) Injection at a pressure which initiates fractures in the confining zone or causes the movement of injection or formaton fluids into an underground source of drinking water is prohibited.
- 15. <u>Injection Volume-Rate Limitation</u>. The volume-rate of produced brine wastes to be injected into the well will be limited to 900 barrels per day.
- 16. Monitoring Requirements.
  - (a) Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. The permittee shall identify the types of tests and methods used to generate the monitoring data.
  - (b) Injection fluid analysis the nature of injection fluids shall be monitored:
    - (1) quarterly for Total Dissolved Solids, major ions and pH, and
    - (2) whenever there is a change in the source of injection fluids. A comprehensive water analysis equivalent to that submitted with the permit application shall be submitted to the Regional Administrator within 30 days of any change in injection fluids.
  - (c) Injection pressure, flow rate and cumulative volume Injection pressure, flow rate and cumulative volume shall be observed weekly. At least one observation of injection pressure, flow rate, and cumulative volume, shall be recorded at regular intervals no greater than 30 days apart.

#### H. PLUGGING AND ABANDONMENT

17. Notice of Plugging and Abandonment. The permittee shall notify the Regional Administrator 45 days before conversion or abandonment of the well.

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Permit No. MTS21PR-0003

- 18. Plugging and Abondonment Plan. The permittee shall plug and abandon the well as provided in the plugging and abandonment plan. See Attachment A. Permittee will abandon the well in a state of static equilibrium with mud weight equalized top to bottom in accordance with 40 CFR Section 146.10(c).
- 19. <u>Cessation of Injection Activities</u>. After a cessation of operations of two years, the permittee shall plug and abandon the well in accordance with the Plugging & Abandonment Plan, unless he:
  - (a) provides notice to the Regional Administrator,
  - (b) demonstrates that the well will be used in the future, and
  - (c) describes actions or procedures, satisfactory to the Regional Administrator, that will be taken to ensure that the well will not endanger underground sources of drinking water during the period of temporary abandonment.
- 20. Plugging and Abandonment Report. Within 60 days after plugging the well, the permittee shall submit a report to the Regional Administrator. The report shall be certified as accurate by the person who performed the plugging operation and the report shall consist of either: (1) a statement that the well was plugged in accordance with the plan (see Condition 18); or (2) where actual plugging differed from the plan, specifying the different procedures used.

#### I. FINANCIAL RESPONSIBILITY

- 21. The permittee is required to maintain financial responsibility and resources to close, plug and abandon the injection well as provided in the plugging and abandonment plan. The permittee must show evidence of financial responsibility acceptable to the Regional Administrator before injection operation is authorized under this permit.
- 22. Insolvency of Financial Institution. In the event of the bankruptcy of the trustee or issuing institution, if one is utilized, of the financial mechanism, or a suspension or revocation of the authority of the trustee institution to act as trustee or the institution issuing the financial mechanism to issue such an instrument, the permittee must submit an alternative demonstration of financial responsibility acceptable to the Regional Administrator within 60 days after such event.

ATTACHMENT A
(Plugging & Abandonment Plan)

ATTACHMENT B (Construction Details)

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- -

ATTACHMENT C (Reporting Forms)

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Public Participation Statement of Basis

#### STATEMENT OF BASIS

CENTURY OIL AND GAS CORPORATION

GOINGS #1, ROOSEVELT COUNTY, MONTANA

UIC PERMIT NUMBER MTS21PR-0003

#### CONTACTS:

Jim Boyter
U. S. Environmental Protection Agency
Montana Office
Federal Building, Drawer 10096
301 South Park
Helena, Montana 59626
Telephone: (406) 449-5486

Pat Crotty
U. S. Environmental Protection Agency
Region VIII
Ground Water Section
1860 Lincoln Street
Denver, Colorado -80295
Telephone: (303):844-2731

## DESCRIPTION OF FACILITY AND BACKGROUND INFORMATION

Century Oil and Gas Corporation will inject water into the Goings #1 from the Goings #27-3 and the Robins 22-15 wells producing from the Charles Formation. The Goings #1 has been injecting produced fluids into the Judith River Formation since March 23, 1982. A maximum of 900 barrels of produced fluid will be injected each day. There are no known drinking water wells within the area of review.

Century Oil and Gas Corporation has supplied all required information and data necessary for permit issuance in accordance with 40 CFR Parts 144, 146, and 147, and a draft permit has been prepared.

The permit will be issued for the operating life of the injection well, therefore, no reapplication will be necessary unless the permit is terminated for reasonable cause (40 CFR 144.39, 144.40, and 144.41). However, the permit will be reviewed every five years, and may be reopened at any time should allegations of endangerment arise.

This Statement of Basis gives the derivation of the site-specific permit conditions and reasons for them. The general permit conditions for which the content is mandatory and not subject to site-specific differences (based on 40 CFR Parts 144, 146, and 147), are not included in the following discussion.

MONITORING DEVICE

(Condition 11)

In order to allow a representative of EPA to inspect the well and take injection pressure measurements, we are requiring that the operator install a one-half inch fitting to: 1) the tubing, and 2) the tubing/casing annulus.

MECHANICAL INTEGRITY

(Condition 12)

The applicant did not submit a cement bond log. However, the cementing records submitted indicates adequate cement above the injection zone for the protection of USDW's.

INJECTION INTERVAL

(Condition 13)

The Judith River formation has been exempted in a 1/4 mile radius of the wellbore of the Goings #1 well as a USDW. The injection interval will be limited to this formation in the horizon between 1,028 feet and 1,116 feet where this well had been injecting approximately 400 barrels of salt water per day since March 1982 prior to the implementation of the UIC program in Montana.

INJECTION PRESSURE

(Condition 14)

Our files contain a record of a step rate test performed on March 20, 1982 when the subject well was completed as a salt water disposal well. The ISIP of 400 psi indicated and the formation breakdown pressure of 500 psi determined by us from the graphical presentation of the test appear to agree considering the friction loss in the 2-7/8 inch tubing used in the test. The test also indicates that an injection rate of 3,456 barrels of salt water per day was achieved with 500 psi injection pressure. The maximum injection pressure requested by the applicant was 700 psi which could initiate new fractures or propagate existing fractures in the confining zone and is, therefore, unacceptable. As the formation breakdown pressure will have increased with the increase in reservoir pressure since injection commenced in March 1982, the maximum injection pressure of 500 psi is considered safe.

INJECTION VOLUME LIMITATION

(Condition 15)

Current practice involves the injection of an average volume of 800 barrels per day, with a maximum volume of 900 barrels per day. The operator may continue to inject these volumes. However, at no time may the operator inject at a higher pressure than the maximum specified in Permit Condition 14 in order to maintain these volumes.

MONITORING REQUIREMENTS

(Condition 16)

The permittee is required to monitor water quality of the injection fluids at reasonable intervals. A water sample of injected fluids shall be analyzed for Total Dissolved Solids, major ions, and pH at quarterly intervals.

The permittee is also required to submit a comprehensive water quality analysis whenever the source of the injection fluid changes.

PLUGGING AND ABANDONMENT PLAN

(Condition 18)

The plugging and abandonment plan submitted by the applicant with the permit application is incorporated into the permit and shall be binding on the permittee. In addition, the requirement stating that the well should be abandoned in a state of static equilibrium was not addressed in the submitted Plugging and Abandonment Plan, that condition has been incorporated into the permit by reference.

FINANCIAL RESPONSIBILITY

(Condition 20)

The bond currently held by the applicant for plugging the well names the State of Montana as beneficiary, not EPA. EPA intends to deliver guidance to the permittee on the type, amount, and mechanism required by permittees to maintain Financial Responsibility in accordance with EPA policy. It is anticipated that this will be done in the next two (2) weeks. At that time, it will be necessary for the applicant to supply the acceptable information. The permit to inject will not be issued until the applicant has submitted, and EPA has accepted, the required information showing that the applicant does have the resources to close, plug and abandon the injection well.

**ADDENDUM** 

#### STATEMENT OF BASIS

#### CENTURY OIL AND GAS CORPORATION

#### GOINGS #1, ROOSEVELT COUNTY, MONTANA

#### UIC PERMIT NUMBER MTS21PR-0003

EPA held a hearing on May 29, 1985, upon request of the Fort Peck Tribes, to gather factual information regarding the hydrogeologic characteristics of the Judith River Formation, and to allow comments to be heard concerning our intent to issue this permit. This well is one of several disposal wells injecting fluid into the Judith River Formation, which the Tribe had requested to be protected as an underground source of drinking water (USDW). This well was injecting prior to the inception of the UIC program (June 25, 1984), and is therefore authorized by rule. As a result of the public hearing and a subsequent technical evaluation of the testimony presented at the hearing, EPA has prepared a statement which establishes EPA's policy on permitting existing and future wells that inject into the Judith River Formation on the Fort Peck Reservation. The issuance of the final permit for this injection well, the Goings #1, is in compliance with that policy.

The draft permit for the Goings #1 Well was published on December 27, 1984. Since that publication this well failed a mechanical integrity test on September 25, 1985, was reworked to remedy the casing leak, and subsequently passed a retesting of mechanical integrity on October 13, 1985.

The following three conditions are being revised. The first one is revised as a result of administrative revision within the UIC program since publication of the draft permit; the second as a result of the administrative revisions plus the specific rework program performed on the well; and the third as a result of Century's fulfillment of the financial responsibility requirements.

# Monitoring Device

(Condition 10)

In order to allow a representative of EPA to take injection pressure measurements, EPA is requiring that the permittee install one-half inch fittings with cut-off valves on the tubing and on the casing-tubing annulus. In addition, a sampling tap will be installed and used to collect a representative grab sample for analytical purposes. Also, the permittee is required to install a flow meter with cumulative volume recorder to accomplish required monitoring.

# Mechanical Integrity

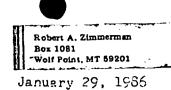
(Condition 12)

This permit condition was revised to reflect the recent successful mechanical integrity test and to describe the method of demonstrating mechanical integrity to be used in the future as necessitated by the rework program which consisted of cementing the tubing/casing annulus to surface, the subsequent mechanical integrity test requirements, and requirements in the event of loss of mechanical integrity.

# Financial Responsibility

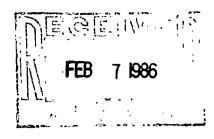
(Condition 21)

The applicant submitted a irrevocable standby letter of credit (Number SC-4185) from Colorado National Bank of Denver in the amount of \$30,000; and a Standby Trust Agreement with the Colorado National Bank of Denver to provide appropriate coverage for the Goings #1 Well and two other wells in the State of Montana and, thereby, satisfy EPA's financial responsibility requirements. The permit includes provisions for requiring alternative financial responsibility demonstration in the event that the issuing institution of the letter of credit or trust becomes insolvent, or the authority of a trustee or institution used in the financial responsibility demonstration is suspended or revoked.



Environmental Protection Agency region VIII Lrinking Water Branch Swin-LW 1 Denver Place, Suite 1300 999-18th Street Lenver, CO 80202-2413

Lear Lebra Ehlert,



In our opinion, the EPA is making an unwise decision by allowing oil companies to inject their salt water and drilling fluids into the Judith River formation here on the Fort Peck Reservation in eastern Montana. It seems so contrary to EPA's past decisions and philosophy to protect the public and their domain.

Roosevelt County, farmers and ranchers, the Land and Mineral Owners Association, and the Fort Peck Indian Agency are on record as opposing any Judith River injections. These groups are in full agreement that the Lakota which is 3000' deeper is a perfect disposal zone.

There is no proven fracture point for Judith, thus future fresh water needs are at jeopardy. Hight now, the Judith River provides water for livestock use near the cities of Wolf Point and Glasgow. Drought conditions and poor drinking water quality are making many consider alternative sources of water. EPA is jeopardizing the quality of life for my children. The Judith River should be left alone. The degradation of ground water on the Reservation makes this a necessity, not a wish! Right now, I cannot drink from our faucats as the oil industry raised havor with our one and only water source. Cooking and drinking water must be bought and hauled. A tradjedy that should be avaided!

We notice while studying EPA's "Statement of Pollicy & Technical Evaluation" dated becember 1985 that words such as no data, insufficient data, but, etc. are used often and always with the public's loss resulting. Our children will suffer from EPA's lack of knowledge and pressure brought on from oil companies. Hight now our fresh water is so important. One does not realize just how important it is until there is none. Tap drinking water is a luxury now.

Please do not allow injections into the Judith river Formation. This zone should be left to the future of our children, our livestock, and our irrigation projects. Please do not be short sighted.

Sincerely,

Robert : Connie Zimmerman

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Standard Form No. 1143

#### ADVERTISING ORDER

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DATE

DEPARTMENT OR ESTABLISHMENT, BUREAU OR OFFICE

<u>S. ENVIRONMENTAL PROTECTION AGENCY. Water Management Division</u>

12/20/85

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ONE TIME ONLY

December 30, 1985

(or prior to)

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U.S. ENVIRONMENTAL PROTECTION AGENCY
PUBLIC NOTICE
UNDERGROUND INJECTION CONTROL PROGRAM
FINAL DETERMINATION

Injection into the Judith River Formation on the Fort Peck Reservation

| AUTHORITY TO ADVERTISE            | INSTRUMENT OF ASSIGNMENT     |
|-----------------------------------|------------------------------|
| NUMBER                            | NUMBER                       |
| EPA Delegations Manual 1-1-A(3)   |                              |
| DATE January 28/ 1976             | DATE 12/20/85                |
| SIGNATURE OF AUTHORIZING OFFICIAL | Contract Specialist          |
| KNAWAT AND                        | <u>  Contract Specialist</u> |

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DEPARTMENT OF HIGHWAYS & TRAFFIC. D.C. Bids are requested for first spring 1966 cement concrete repair contract, including incidental work, Washington, D.C., Invitation No. C-5576-H, consisting of 11,000 sq. yds. PCC Class BB sidewalk repair and 2,000 cu. yds. PCC Class A pavement, alley, & driveway repair, both cut repairs only. Bidding material available from the Procurement Officer, D.C. Sealed bids to be opened in the Procurement Office at 8:00 p.m., November 16, 1965.

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